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Mr. Ken Herstowski
Project Manager
Air, RCRA and Toxics Division
United States Environmental Protection Agency
Region 7
901 North 5th Street
Kansas City, Kansas 66101

ENVIRONMENT

Subject:
Work Plan for Soil Removal at Omaha Baseball Stadium
Union Pacific Railroad – Omaha Shops Site
Omaha, Nebraska
RCRA ID# NED000829754
EPA Docket No. RCRA-7-2000-0026

Date:
05 February 2009

Contact:
John Shonfelt

Phone:
913.492.0900

Email:
john.shonfelt@arcadis-us.com

Our ref:
KC001557.0001

Dear Mr. Herstowski:

This letter presents a Scope of Work and Work Plan to excavate and dispose of a limited amount of soil from a recently discovered area near direct push borings DPW-10, DPW-11, and DPW-12 within the footprint of the planned downtown Omaha Baseball Stadium, in Omaha, Nebraska. The proposed soil removal is considered an immediate response action and is scheduled to begin the week of February 16, 2009, which corresponds with the start of construction activities at the baseball stadium.

The excavation program discussed in this letter has been developed to be consistent with the Operable Unit 2 Corrective Measures Implementation (OU2 CMI) Work Plan[1], which outlines procedures for removing soil from re-development projects within OU2.

Previous Correspondence Relating to Stadium Sampling
Numerous correspondence pertaining to the pre-development sampling activities at the Omaha stadium have been sent to USEPA by ARCADIS on behalf of Union Pacific Railroad (UPRR), including:

- Letter from ARCADIS to USEPA, dated August 29, 2008 - summarized the intent to perform a Pre-Development Investigation in the vicinity of the baseball stadium footprint that would be consistent with the vapor intrusion mitigation determination requirements outlined in the OU3 Work Plan.

[1] ARCADIS, 2008. Union Pacific Railroad Operable Unit No. 2. Corrective Measures Implementation Work Plan. ARCADIS, Lenexa, Kansas. April.

- Letter from ARCADIS to USEPA, dated November 20, 2008 - presented the results of the initial baseball stadium sampling and proposed additional groundwater and soil sampling in the vicinity of Boring DPW-10

- Fourth Quarter 2008 (October through December) Progress Report for activities at the Omaha Shops Site, dated January 8, 2009 – summarized the pre-development sampling program and transmitted analytical laboratory results.

- Letter from ARCADIS to USEPA, dated January 28, 2009 – presented the results of the additional Pre-Development sampling and perimeter perched water sampling performed by others

Background

As described in the Stadium Sampling Summary Letter (dated January 28, 2009), an area containing elevated concentrations of constituents of concern (COCs), consisting of chlorinated solvents and their degradation products (perchloroethene, trichloroethylene, cis-1,2-dichloroethene, and vinyl chloride), was observed in the vicinity of direct push borings DPW-10, DPW-11, and DPW-12, as shown on Figure 1. This location lies within the construction boundaries of the downtown Omaha baseball stadium. Since the soil will not be accessible after the has been constructed, UPRR intends to excavate and dispose of soil in the vicinity of the impacted borings.

Soil Removal Extent and Depth

The extent of the stadium excavation is shown on Figure 1, and encompasses the Pre-Development investigation groundwater, perched water, and soil boring locations that contained elevated concentrations of COCs, as described in the Stadium Sampling Summary Letter, dated January 28, 2009. Excavation will be performed to a total depth of 8 feet below existing ground surface (bgs) to the limits of excavation shown on Figure 1. The 8 ft bgs depth was determined to be the limit of potential construction worker contact with soil during construction in this vicinity. Additionally, the water sampling performed in this area suggests that the perched water levels are approximately 8 to 10 ft bgs at this location.

The excavation footprint is shown on Figure 1. An estimated 1,500 cubic yards of soil will be excavated and disposed as special waste at the Butler County Landfill in David City, Nebraska.

Soil Excavation Procedures

Excavation of impacted soil will be performed in a manner that prevents direct exposure between site workers and impacted soils. Typical equipment for these activities includes backhoes, excavators and front-end loaders.

Storm water controls, including temporary berms, will be utilized in the event of precipitation during excavation activities, although the work will be scheduled to avoid periods of precipitation.

Staging of excavated soil will be minimized. Excavated soil will be placed directly into trucks for immediate transport to the landfill. Any impacted soil that is stored prior to off-site transport will be covered.

The soil generated from excavation activities has been pre-profiled for acceptance at the off-site landfill, and will be transported to the landfill with the appropriate documentation.

Confirmation Sampling

Upon removal of the soil to the extent defined on Figure 1, confirmation samples will be collected from the sidewalls and bottom of the excavation. Five composite samples (the four sidewalls and the excavation bottom), will be collected and analyzed for the four COCs detected during the Pre-Development Investigation: perchloroethene, trichloroethylene, cis-1,2-dichloroethene, and vinyl chloride. Each composite sample will be comprised of at least five aliquots from the given sidewall or excavation floor. Samples will be collected in accordance with the procedures set forth in the Sampling and Analysis Plan[2] for corrective measures at OU3. Samples will be analyzed in accordance with the Quality Assurance Project Plan[3] for OU3 corrective measures.

Soil Management and Disposal

Section 6 of the OU2 CMI Work Plan[1] provides procedures for management and disposal of soil excavated at OU2, and will be implemented for this soil removal project. These soil handling procedures are summarized below:

All soil to be removed at the stadium excavation will be handled as non-hazardous soil, and will be transported to the Butler County Landfill in David City, Nebraska as a special waste. Special waste shipped-off site for disposal will be documented by a manifest, a signed copy of which will accompany each shipment of waste from point of origin to the final destination.

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[2] ARCADIS, 2008. Site-Wide Sampling and Analysis Plan and Site-Wide Quality Assurrance Project Plan for Corrective Measures Implementation. Operable Units OU2 and OU3. Union Pacific Railroad 9th and Webster Streets. Omaha, Nebraska. ARCADIS. Lenexa, Kansas. April

Application of Biological Amendments at Base of Excavation

After the completion of the excavation to the defined extent shown on Figure 1, approximately 6,000 pounds of DARAMEND™ will be placed at the base of the open excavation. DARAMEND™ is a patented bioremediation technology made by Adventus that utilizes solid-phase organic amendments to beneficially alter the soil structure, nutrient profile and water-holding capacity. The DARAMEND™ will be homogenously distributed throughout the base of the excavation, and incorporated into the existing soil. The DARAMEND™ particles will become hydrated and function as aquatic microsites where native microorganisms can grow, contact the COCs, and enhance the naturally occurring degradation.

Excavation Backfill and Restoration

Backfilling, grading, and site restoration after excavation will be completed in such a way as to prevent creation of large open areas that could collect and retain runoff. The excavated areas will be backfilled and compacted with clean soil. After backfilling, the excavation will be brought flush to the final grade required for the stadium construction. Backfilled areas will be compacted to minimize the potential for future settlement using three to five passes with track-mounted equipment.

Schedule

Preliminary construction activities for the baseball stadium are occurring, starting with removal of the concrete parking areas in the vicinity of the proposed excavation. The soil removal is proposed under the following schedule (weather permitting):

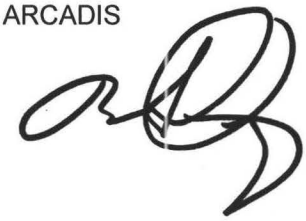
Task	Date
Obtain Landfill Special Waste Permit	Completed
Submit Work Plan to USEPA	Week of February 2, 2009
Perform excavation, disposal	week of February 16, 2009
Backfill and compact with clean fill	week of February 16, 2009
Submit Soil Removal Completion Report	by March 27, 2009

Weather may delay or impact the schedule for the field activities, as it is desirable to perform the soil removal during precipitation-free weather,

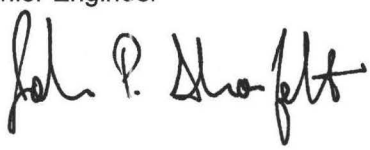
Please call Jeff McDermott of UPRR at (402) 544-3675 if you have any questions regarding the enclosed information.

Sincerely,

ARCADIS



Bretton C. Overholtzer
Senior Engineer



John P. Shonfelt
Senior Project Manager

Copies:
Jeff McDermott (UPRR)
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Bill Gidley (NDEQ)
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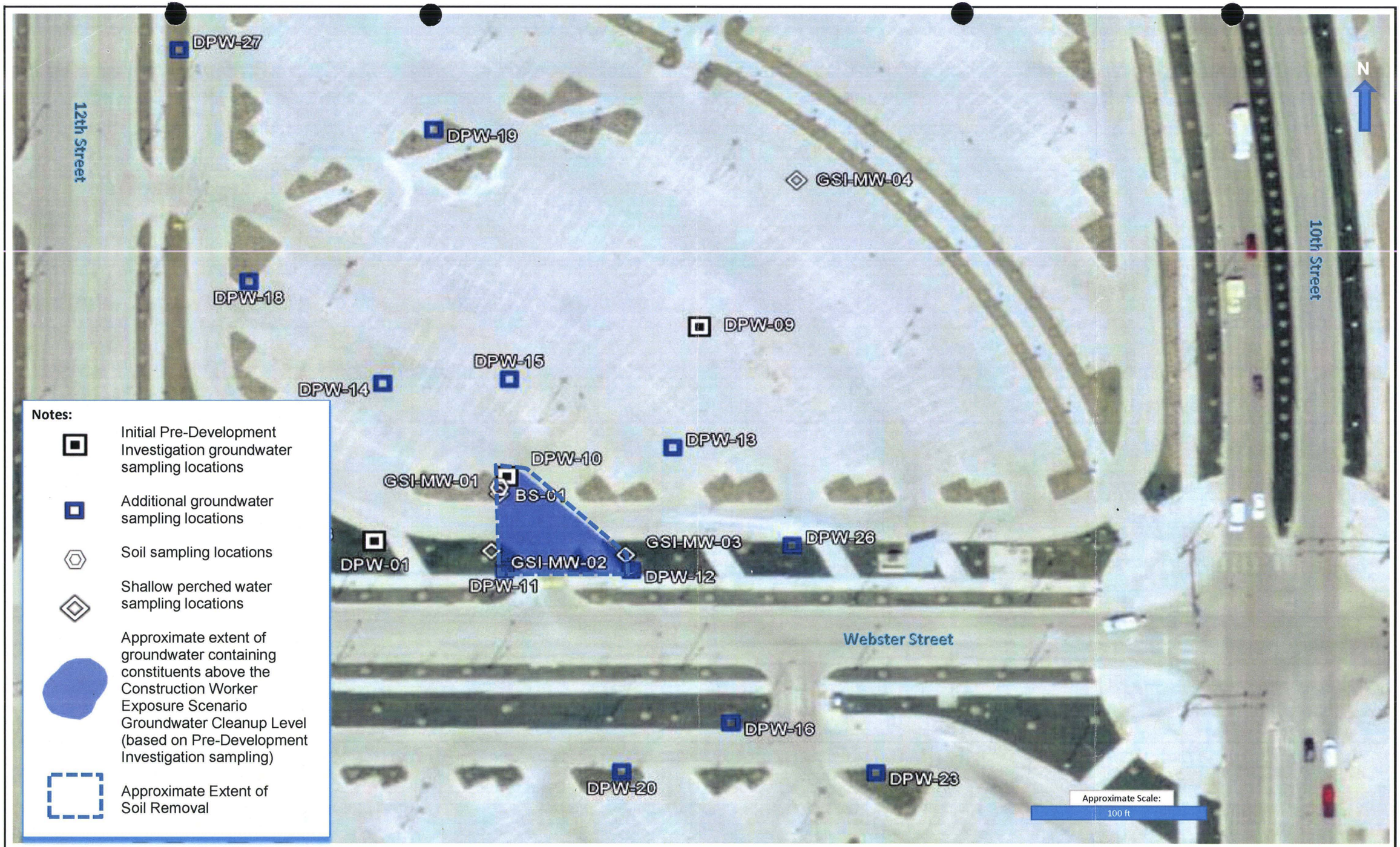

Project Manager: John Shonfelt Drawn by: BCO Checked by:	ARCADIS 8725 Rosehill, Suite 350 Lenexa, Kansas 66215 Tel: 913.492.0900 Fax: 913.492.0902	**Approximate Extent of Soil Removal** **Stadium Pre-Development Sampling - UPRR Omaha Shops** **Omaha, Nebraska**	Figure **1**

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